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NOT TO BE PUBLISHED IN THE OFFICIAL REPORTS

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

FIFTH APPELLATE DISTRICT

THE PEOPLE, Plaintiff and Respondent, v. BRENDA ESTEFANIA BARRERA, Defendant and Appellant.	F074032 (Super. Ct. No. CRF46999) **OPINION**

APPEAL from a judgment of the Superior Court of Tuolumne County. Donald I. Segerstrom, Jr., Judge.

Scott N. Cameron, under appointment by the Court of Appeal, for Defendant and Appellant.

Xavier Becerra, Attorney General, Gerald A. Engler, Chief Assistant Attorney General, Michael P. Farrell, Assistant Attorney General, Louis M. Vasquez, Amanda D. Cary, and Lewis A. Martinez, Deputy Attorneys General, for Plaintiff and Respondent.

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INTRODUCTION

On March 4, 2016, at the conclusion of a jury trial, Brenda Estefania Barrera was convicted of second degree murder (Pen. Code, § 187, subd. (a); count 1)[1] and driving under the influence of a drug, causing great bodily injury (Veh. Code, § 23153, subd. (e); count 3).[2] The jury also found true allegations that two of the three surviving victims were 70 years of age or older when they suffered personally inflicted great bodily injury (§ 12022.7, subd. (c)), and that the third surviving victim suffered personally inflicted great bodily injury (§ 12022.7, subd. (a)), but was not 70 years old or older.[3]

On May 20, 2016, the trial court denied Barrera's motion for new trial and sentenced her to an indeterminate prison term of 15 years to life for second degree murder and to a concurrent term of two years for driving under the influence and causing injury. The court sentenced Barrera to consecutive determinate terms of three years for the great bodily injury enhancement for the victim under age 70 and to five years each for the great bodily injury enhancements charged for the two victims over age 70.

On appeal, Barrera contends the trial court committed *Kelly*/*Frye*[4] error by allowing the People's expert to testify concerning the level of tetrahydrocannabinol

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[1] Unless otherwise designated, all statutory references are to the Penal Code.

[2] Vehicle Code section 23153, subdivision (e) was subsequently amended and superseded by Vehicle Code section 23153, subdivision (f).

The jury acquitted Barrera of gross vehicular manslaughter while intoxicated (§ 191.5, subd. (a); count 2). Prior to trial, Barrera admitted one misdemeanor count of driving with her privilege suspended with two prior convictions of driving with a suspended license within five years, and causing injury (Veh. Code, § 14601.4, subd. (a); count 4).

[3] The criminal complaint was deemed the information at the conclusion of the preliminary hearing. The complaint alleged that the three surviving victims of the car crash suffered bodily injury *and* death. All three surviving victims, however, testified at trial.

[4] *People v. Kelly* (1976) 17 Cal.3d 24; *Frye v. U.S.* (D.C. Cir. 1923) 293 F. 1013 (*Kelly*/*Frye*).

(THC) residue in Barrera's blood and to opine as to how recently she ingested cannabis even though the laboratory noted that quantitative values should be considered only an estimate and would not be reported.[5] The report stated there was a larger than expected variation in quantitative values of reanalyzed samples and the accuracy control sample could not be measured within 20 percent of its known quantity. Barrera contends the prosecutor committed misconduct by argumentative cross-examination of the defense expert and by referring to the deceased victim's surviving children and grandchildren during trial. Barrera argues her trial counsel was ineffective for failing to file a suppression motion on the results of a Romberg field sobriety test because she had not expressly waived her rights pursuant to *Miranda v. Arizona* (1966) 384 U.S. 436 (*Miranda*) prior to the investigating officer questioning her while performing the field sobriety test. Barrera challenges the trial court's ruling permitting admission of evidence that her driver's license was suspended. Barrera urges the combined effect of these errors constitutes cumulative error.

We hold that the trial court erred in failing to conduct a hearing on the third prong of *Kelly*/*Frye* to establish that correct laboratory procedures were followed and to establish the foundation of the opinion of the People's expert based on THC quantity results that were inaccurate and could not be reproduced. The error was prejudicial and requires reversal of the judgment.[6] To aid the trial court and the parties in the event of retrial, we discuss the remaining issues raised by the parties.

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[5] The Department of Justice criminalist who was qualified at trial as an expert measured THC in Barrera's blood sample using a gas chromatograph mass spectrometry machine (spectrometer).

[6] Because we reverse the judgment, we do not discuss Barrera's contention that the trial court applied the wrong legal standard in denying her motion for new trial.

Barrera was 24 years old at the time of the collision. In supplemental briefing, Barrera argues, and the People concede, that because she was 25 years old or younger, she is entitled to a hearing to assess the factors relevant to a future parole hearing pursuant to *People v. Franklin* (2016) 63 Cal.4th 261. (See §§ 3051 and 4801.) We note

FACTS

Events of April 21, 2015[7]

On April 18, Barrera borrowed a Mercedes C230 Kompressor sedan belonging to Alex Valencia, her son's father. Valencia said the car had no known mechanical problems. Valencia was unaware that Barrera's license had been suspended and would not have lent the car to her had he known it was suspended. Valencia told investigators that if she can obtain it, Barrera smokes marijuana every day to aid with her depression. Barrera also took a prescription medication for depression.

After 9:30 a.m. on April 21, Barrera was traveling west on Highway 108 in Valencia's Mercedes. Donald Hrdlicka was also westbound in his pickup truck and noticed a silver Mercedes approaching his truck very rapidly from behind. Hrdlicka saw the Mercedes veer to the right onto the shoulder of the road, as though it were going to pass him. The car almost hit Hrdlicka's truck. It then slowed down and the distance between Hrdlicka's truck and the Mercedes increased. Although the operator of the Mercedes appeared to be driving normally some of the time, three times Hrdlicka saw the Mercedes drift onto the right shoulder of the road and twice cross the road's center line, going all the way over into the eastbound lane. Hrdlicka decided he had to contact law enforcement to report what was happening and was concerned because there was road construction less than a mile from their location.

There were no law enforcement officers at the construction site. Hrdlicka pulled over at a red light at a nearby intersection. At first, Hrdlicka did not think the driver of the Mercedes would stop, but the car stopped next to Hrdlicka's truck. He could see the driver was a young female with a dark complexion and dark shoulder-length hair. He did

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that in the event of Barrera's retrial and conviction, she may be entitled to a *Franklin* hearing depending on the type and length of sentence imposed.

[7] Subsequent references to dates are to dates in 2015.

not see anyone else in the Mercedes. The driver was looking slightly to her right and staring down at the floorboard of the car. The driver did not look up and seemed "spaced out" to Hrdlicka. When the light turned green, Hrdlicka memorized the license plate of the Mercedes, pulled over, called 911, and gave the operator a full description of the car and driver.

Near the same place and time that Hrdlicka pulled over, Gil Chavez saw a vehicle pull away from a stop light and begin to veer off the road. The car abruptly pulled back onto the road and Chavez had to apply his brakes to avoid colliding with the vehicle. Chavez saw the vehicle veer to the right four or five times as if trying to pass from that side and then pull back into the traffic lane.

Jesse Rice saw the Mercedes come up behind his vehicle very fast. Rice thought the operator's driving was erratic and had his wife call 911.

Dana Gonzales also saw the Mercedes pull over to the right side of the road and back into traffic. Gonzales activated her dashboard video camera. Gonzales's video recording was played for the jury. The video ended with the Mercedes veering into the eastbound lane and crashing into an oncoming sedan that flipped over onto its roof before coming to a stop. The Mercedes rolled to the westbound shoulder, then down a steep embankment. Gonzales, who had medical training, went to the sedan that Barrera had hit. Three passengers were injured and disoriented. The driver had several serious injuries, was not breathing, and appeared to be deceased.

Chavez saw the female driver of the Mercedes, whose hair was a pink-purple color, get out of the driver's side and assist the passenger who had a different color hair.

Maxsimiano Aldana was driving the sedan with which Barrera collided. He died from his injuries in the accident. His three passengers, Martha Aldana (his wife), Sara Cabrera, and Vincente Cabrera (also husband and wife), all testified as to the serious

injuries they sustained in the accident.[8] Over defense objection, Sara Cabrera testified she had one child and two grandchildren. Also over defense objection, Martha Aldana testified her husband had eight children from a previous marriage and they had one son together. Maxsimiano had 29 grandchildren.

California Highway Patrol Officer Tim Scott was dispatched to the accident scene and was designated the lead investigating officer. Because he was some distance away, it took him 15 minutes to arrive. Other emergency vehicles were already there. Barrera told Scott she was the driver of the Mercedes. Her eyes were bloodshot, her speech was slow and heavy, and she appeared lethargic. Scott smelled no alcohol or marijuana on Barrera. Barrera told Scott her driver's license had been suspended.

She told Scott she had not consumed alcohol in three days and had not smoked marijuana in five days. He performed a horizontal gaze nystagmus (HGN) test on Barrera while she was in the back of the ambulance and noticed a rapid onset of nystagmus and found it present "at the extremes." The presence of nystagmus can indicate a person is under the influence of alcohol or another depressant. Scott was unsure whether marijuana could cause nystagmus. He also conceded that about half of the population will experience nystagmus at the extremes. Scott had Barrera perform a preliminary alcohol screening by blowing into a field breathalyzer. The result was that she had .000 percent alcohol in her blood. Scott acknowledged that bloodshot eyes could be caused by crying or allergies.

Barrera explained that the day before, on April 20, she had gone to sleep about 8:00 a.m. and slept until 4:00 p.m. She visited her son in Sunnyvale and later picked up her friend. Barrera said that at 1:00 a.m. on April 21 she left her son to go to the Black Oak Casino in Tuolumne County. She arrived at the casino about 4:00 a.m. Barrera said

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[8] Although the Cabreras were both over 70 years old, Martha Aldana was not 70 years old on the date of the accident.

she left the casino at 8:00 a.m. to return home. She had not slept in 18 hours (since the afternoon the day before the accident) and had been awake the entire prior evening. Barrera told Scott her passenger had fallen asleep and when Barrera looked over at her, she crossed over the double yellow lines into oncoming traffic, causing the collision. Scott formed the opinion that Barrera was under the influence of a substance and arrested her at the hospital at 12:17 p.m.

Scott reviewed surveillance video from the Black Oak Casino with the jury. The video shows a Mercedes arriving at the casino on April 21 at 7:38 a.m. and leaving the casino at 9:14 a.m. the same day. In both the arrival and departure videos, the Mercedes crossed over the double yellow lines. The video also shows Barrera parking in a parking garage. She spends several minutes in her car and can be seen exiting the car and walking through the garage. She is not stumbling and appears to be walking with a normal gait.

Ernest McCoy worked as a public safety officer and emergency medical technician for Black Oak Casino. One of his duties is to watch for intoxicated people, warn them not to drive, and to call law enforcement if they do drive. Two days after the accident, McCoy was questioned by an officer with the California Highway Patrol regarding his observations of Barrera when she was inside the casino. When McCoy first saw Barrera, she was sitting at a slot machine; when he saw her again later, she was walking normally and was not staggering or stumbling.

Drug Recognition Expert's Evaluation

Between 12:17 and 12:40 p.m., Officer Steven Warzee, a drug recognition expert, conducted a drug evaluation of Barrera while she was on a gurney. Before Warzee evaluated Barrera, Officer Scott could not recall whether she had been given intravenous fluids or any medication. Barrera was immobilized during the evaluation due to her injuries which was not a customary way to conduct the evaluation.

Warzee asked Barrera if she had a head injury; she replied she did not. Barrera's speech was slow and mumbled. She seemed very lethargic and calm given that she had been involved in a major traffic collision. Barrera's coordination was also slow; her movements were very distinct and unnatural. Barrera's face was red and flushed, her eyes were bloodshot, and her eyelids looked droopy.

Warzee explained that HGN is the inability of the eyes to track. If one imagines a marble rolling across a table, it will roll smoothly without bumps. Comparing the marble to eyes, there would be no nystagmus present in eyes being tested for tracking a stimulus from side to side. Nystagmus can result from a medical condition, such as head trauma. A HGN test is also used to detect whether one is under the influence of alcohol, a central nervous system depressant that triggers nystagmus. Barrera was able to follow the stimulus during the nystagmus test but there was a lack of smooth pursuit present in each eye. Barrera had a distinct and sustained nystagmus at maximum deviation, but no vertical gaze nystagmus. Warzee found that Barrera's pupils constricted slowly after the application of light but she did not have pupillary unrest.

Warzee tested Barrera for lack of convergence – the inability of the eyes to cross. Most people's eyes cross as a finger is moving toward the face and close to the nose. Classes of central nervous system depressants, such as inhalants, cannabis, and disassociative anesthetics, cause the eyes to be unable to converge. Warzee observed a lack of convergence in Barrera's left eye. Because Barrera was immobilized, Warzee was unable to conduct three of the four standard field sobriety tests. The one Romberg balance test he could perform was how Barrera estimated time. She was told to estimate 30 seconds. Instead of 30 seconds, Barrera told Warzee 60 seconds had elapsed after 47 seconds had elapsed. Warzee observed a brown coating and bumps on Barrera's tongue which indicated to him that she had smoked marijuana. Warzee concluded that Barrera was under the combined influence of a central nervous system depressant and cannabis and was unable to safely operate a motor vehicle.

Warzee transported Barrera to jail for booking and conducted a search of her purse. When Warzee found a glass smoking tip, Barrera spontaneously said she used it to smoke blunts, which were cigars with the tobacco replaced with marijuana. Warzee found containers with labels stating they contained medical cannabis that when opened smelled like marijuana. Warzee questioned Valencia who told him that Barrera frequently smoked marijuana to aid with her depression. Although Valencia mentioned that Barrera had previously used Xanax, Warzee conceded that neither he nor Scott included this information in their initial April 2015 reports. Warzee prepared a supplemental report two days before trial which included Barrera's reported use of Xanax. Valencia told Warzee he did not know how long Barrera used Xanax.

During cross-examination, Warzee explained Barrera's bloodshot eyes were associated with alcohol use and that marijuana use causes reddened conjunctiva, not red eyes. Warzee said the National Highway Traffic Safety Administration has reported that droopy eyelids can happen just from being tired. Fatigue can cause slow, mumbled speech as well as lethargy. The HGN test is normally performed on a subject who is standing and nystagmus is not a symptom of marijuana use. There are many reasons a person might have nystagmus. Warzee conceded that he performed the nystagmus test in a non-standard manner, while Barrera was lying down on a gurney looking up at the ceiling.

Warzee used the hospital monitor attached to Barrera to record her vital signs. Her heart rate was 96 beats per minute, and her blood pressure was 107 over 65, which Warzee described as low and inconsistent with one experiencing the effects of marijuana. Usually marijuana elevates blood pressure. Warzee said he erroneously noted in his report that Barrera's blood pressure was normal. Barrera also had tight muscles, also inconsistent with being under the influence of cannabis. Warzee was unaware that Dilaudid had been ordered at the hospital at about the same time he started his evaluation. Dilaudid is a narcotic analgesic that can cause droopy eyelids, drowsiness, depressed

reflexes, and slow speech. Information that Barrera was being administered this medicine would factor into Warzee's analysis of her condition. Warzee did not observe that Barrera was suffering from any medical condition when he was evaluating her.

Department of Justice Expert

John Lopez worked as a criminalist for the Department of Justice. Lopez had a Bachelor of Science degree in cell biology from the University of California, Davis. Lopez attended seminars with the Borkenstein Institute at Indiana University and had in-house training with the Department of Justice. The trial court found Lopez qualified as an expert on chemical testing of bodily fluids for the purposes of discovering whether they contain drugs as well as the effect of drugs on the human body for the purpose of whether the person is driving under the influence.

According to Lopez, a person continues to feel the effects of marijuana for two to three hours after smoking it. The effects of marijuana use may include a lack of convergence in the eyes, dilated pupils (but not necessarily), increased pulse rate, bloodshot eyes, and, in some cases, a green tongue. The person can suffer short-term memory loss and can feel relaxed. These effects are the same for someone who chronically uses marijuana. A person who has used marijuana can have impaired depth perception and a slower reaction time which can have a negative effect on his or her ability to drive a motor vehicle. The active ingredient in marijuana, THC, is metabolized into hydroxy THC and carboxy THC.

Xanax, also known as Alprazolam, is prescribed for anxiety and panic disorders. It is a depressant that slows down the body's central nervous system. In high doses, there is both horizontal and vertical gaze nystagmus and an inability for the eyes to converge. There is a slow reaction when light is introduced to the eyes and one's pulse, blood pressure, and heart rate will go down. The effects of Xanax are felt for three to four hours. It makes one feel drowsy, sleepy, and lethargic. Taking marijuana and Xanax together, which have opposing effects on heart rate, can cause a whole range of

symptoms. A person who consumed both marijuana and Xanax would be more impaired than had he or she consumed only marijuana.

Barrera's blood was drawn at 12:40 p.m. the day of the collision. Lopez analyzed Barrera's blood using a spectrometer. The spectrometer separates out all of the blood's different components and qualitatively measures the type of substance in the blood and the quantity of that substance in the blood. Lopez said his laboratory analyzes well over 10,000 samples a year. Learning how to run the spectrometer requires initial training. Lopez explained it takes five to 10 minutes to tune the instrument. If the instrument is not working, it is taken out of service. According to Lopez, drug samples are refrigerated and remain stable for years in blood vials, yielding close to the original results.

Lopez found the presence of Alprazolam and the metabolites of marijuana, indicating Barrera had used marijuana within the past 12 hours. When Lopez was asked by the prosecutor for the quantitative THC results, defense counsel objected this was newly discovered information, and more importantly, that the laboratory report itself noted quantitative results should be considered only an estimate. In a hearing outside the jury's presence, defense counsel further objected on *Kelly/Frye* grounds to the very admissibility of quantity evidence due to its unreliability. As set forth in greater detail below, the trial court overruled these objections, finding that Lopez was an expert and any issues with the evidence went to its weight, not its admissibility.

Lopez testified that from the quantitative analysis of THC in Barrera's blood, it was his opinion that she had consumed marijuana within three hours of when her blood was drawn. Lopez explained that when marijuana is first consumed, THC spikes high, above 100, and then after three hours it drops below five nanograms per milliliter of blood. Lopez could not tell anything about the recency of Barrera's usage of Alprazolam. Given a hypothetical based on the facts of this case, Lopez concluded that such an individual would be under the influence, too impaired to drive a motor vehicle, and also

under the influence of a central nervous system depressant. THC "could add a factor as well."

Lopez acknowledged on cross-examination that he prepared a report about the presence of THC in Barrera's blood sample which did not include the THC levels, although these quantitative results were listed elsewhere. Lopez explained that when analyzing THC, a comparison is made to samples with known numbers. If those samples are not within an accepted error range, then the numbers are not reported. Lopez testified that if the range of error in a control sample is greater than 20 percent, the laboratory does not report quantity. Lopez further stated that an acceptable range of error for a quality control sample is 20 percent. Defense counsel asked Lopez, "when you tested Miss Barrera's blood, your lab was finding multiple instances where the range of error for some samples was outside of 20 percent, right?" Lopez replied: "That is correct. That is why we did not report the numbers." Lopez also acknowledged his laboratory was reviewing its procedures to determine why it had these error rates and this was why his laboratory did not allow him to report the quantity of THC in Barrera's blood.

Lopez admitted the laboratory was not confident the error rate was within 20 percent. Nevertheless, Lopez testified that based on the quantity of THC in Barrera's blood, she had recently used marijuana. Lopez conceded that Barrera could have taken Alprazolam as long as two days and seven hours before her blood test. Lopez did not test Barrera's blood for the presence of Dilaudid, but if it was present it would have shown up in his testing. On cross-examination, Lopez conceded that the hypothetical used by the prosecutor was also consistent with someone who had not slept and was fatigued. Lopez further conceded that things other than impairment can cause nystagmus.

On redirect examination, the prosecutor asked Lopez to assume an error rate of only 20 percent. Lopez said he was confident that based on a 20 percent error rate, the quantity result from the spectrometer test showed Barrera had consumed marijuana

within three hours of the blood draw. Lopez stated that redness of the conjunctiva and of the eyes themselves appeared the same to someone looking at them.

Defense Expert

The defense expert, Okorie Okorocha, has a bachelor's degree in biology, a law degree, a master's degree in pharmaceutical sciences, and a second master's degree in forensic toxicology. Okorocha is a licensed attorney and has testified in 199 trials in California and over 3,000 times in United States military courts in the United States and Germany. Okorocha has taken online courses from M.I.T., Cornell, Stanford, Nova, Southeastern, and Harvard.

Okorocha read the laboratory report of Barrera's THC levels. When asked about a 20 percent error rate in the laboratory tests for THC, Okorocha explained it meant "the minimum error is above 20 percent" because the laboratory was "allowing 20 percent leeway and they're still way outside of that." Okorocha explained the laboratory director determined the laboratory could not report the results because they could not be validated and one should "never use unreportable results." Okorocha stated that "[n]obody should be using unreportable results to make a decision in any proceeding." Results can be unreportable due to things like inaccuracy or being below the limits of detection.

Okorocha later read the language in the laboratory report stating that the quantitative values should only be considered an estimate and will not be reported. He explained that the reference to "UTAK" not being within 20 percent was referring to a quality control sample of the substance being tested provided by a third party to determine the accuracy of the testing equipment. This is to insure consistent results. The Department of Justice allows a "20 percent leeway" and indicated in its report that the laboratory method for measuring THC was not validated, leading the laboratory director to state the results should not be reported. This was not a decision made by the technician operating the equipment.

Okorocha explained that Lopez's testimony that Dilaudid would have shown up in Barrera's blood because Lopez tested for opiates is inaccurate because Dilaudid is an opioid, a synthetic narcotic analgesic as opposed to an opiate. The test for opiates is not necessarily a test for an opioid.

According to Okorocha, the active ingredient in THC can be found in people who have not used marijuana for five days to two weeks. Okorocha found Lopez's opinion that Barrera used marijuana within three hours of the blood draw to be "completely unsupportable." The evidence only supported that Barrera consumed marijuana within two weeks prior to the blood draw. Okorocha was aware of the 12-step process for a drug examination. He explained that a normal pulse rate is between 60 and 100 beats per minute and a rate of 92 would be normal. Okorocha said that the manual used by law enforcement clearly makes a distinction between regular bloodshot eyes, which have nothing to do with marijuana use, and red conjunctiva, which are a result of marijuana use. Bloodshot eyes can be caused by eye irritants, dry eye, and fatigue.

Okorocha also questioned Warzee's performance of the HGN test and said no opinion could be based on his test. A lack of convergence of the eyes would be present in one-third of the population who did not consume marijuana. It was nonsensical that marijuana would cause a lack of convergence of a single eye, as Barrera experienced, and is such a novel situation that the person should be seen by a neurologist.

Okorocha stated that Xanax can remain in one's system for two to five days. Its effects do not last that long which is why it is often prescribed to be taken twice a day. The Department of Justice's policy provides that drug levels do not predict impairment. Further, field sobriety tests have been studied many times and the highest accuracy they ever achieve is 50 percent, which is as good as guessing. Okorocha explained it is not really possible to distinguish a driver who is impaired from fatigue from one who is impaired from drugs or alcohol. People who are fatigued can be lethargic and drowsy and some of them have bloodshot eyes.

Okorocha explained that someone who uses a substance regularly develops a tolerance and it takes more of the substance to cause impairment. There are some individuals under the influence of marijuana who drive better because they are paranoid and more focused. Okorocha concluded there was no toxicological evidence showing Barrera was affected by any drug that was detected because those drugs remain in a person's system for several days after the drug has any effect.

Emergency Room Physician

Exhibit 14 was Barrera's medical records from her hospital stay. Page A indicates Dilaudid was ordered at 12:18 Pacific daylight time on April 21, STAT by injection and that the stop date of the medication was 12:18 Pacific daylight time on the same day. Dr. Stephanie Fay Stuart was the emergency room physician who treated Barrera the day of the accident. Dr. Stuart explained that Dilaudid, also known as hydromorphone, was ordered at 12:18 p.m., and it looked as though from page Q of exhibit 14 that it was administered at 2:44 p.m. The medicine was ordered STAT, which means it was to be administered immediately. The fact that the stop date was the same time as the time the medication was ordered could have been an automatic time stamp by the computer. Because she was not the person who administered the medication, she could not be certain if it was given to Barrera prior to 2:44 p.m. Barrera told Dr. Stuart that she was in pain.

Dr. Stuart explained that Barrera's blood pressure of 107 over 65 was within normal range. Between 12:25 p.m. and 1:12 p.m. Barrera's pulse rate dropped from 86 to 76 beats per minute. Being in pain can raise a patient's pulse rate so a drop in the pulse rate could mean Barrera had been administered Dilaudid. Dr. Stuart described the decrease in Barrera's pulse rate as insignificant because either pulse rate was within a normal range. The neurological notation in Barrera's records states that she was alert, and oriented to person, place, time, and situation. She had no focal neurological deficit.

ADMISSIBILITY OF SPECTROMETRY EVIDENCE

Introduction

Barrera does not challenge the first two prongs of the *Kelly*/*Frye* test. Barrera concedes in her opening brief that gas chromatograph mass spectrometry is not a new scientific technique and, by implication, is generally accepted in the scientific community. However, Barrera challenges the admissibility of the quantitative findings of the Department of Justice test under the third prong of *Kelly*/*Frye* because (1) the margin of error for the accuracy control sample was greater than 20 percent, and (2) the laboratory itself could not reproduce quantitative results in individual test samples and therefore would not report quantitative results. Barrera contends the court should have conducted a third-prong *Kelly/Frye* hearing because she had a right to challenge whether proper testing procedures had been employed.

We agree with Barrera that she was entitled to a *Kelly/Frye* hearing to challenge the validity of the testing procedures. Because the laboratory report stated on its face that quantitative results could not be reproduced, should only be considered estimates, and should not be reported, the trial court was on notice that there were problems with the evidence that went to its admissibility and not just its weight. Further, the evidence presented at trial demonstrated the error rate in testing a control sample of a known quantity was greater than 20 percent. The People's expert's reliance on a questionable THC quantity in Barrera's blood undermines his opinion that she used marijuana within three hours of when her blood was drawn. Because the error was prejudicial, we reverse the judgment and remand for further proceedings. On remand, the trial court shall conduct a full Evidence Code section 402 hearing to consider these matters and shall also comply with Evidence Code sections 801 and 802.

Hearing on Admissibility of THC Quantity

The court conducted a hearing outside the jury's presence to determine the admissibility of the quantitative results for marijuana. The court asked Lopez if he

conducted a quantitative analysis of Barrera's THC levels and he replied affirmatively but said, "it was not reported." Lopez explained the laboratory had suspended reporting quantitative THC levels in early 2015 and was reevaluating its procedures "because we found some samples, when they were re-analyzed, were not within 20 percent."

Quantitative numbers were obtained from Barrera's blood sample. The prosecutor sought to ask Lopez about the significance of the quantitative number. Lopez explained a higher THC quantity would indicate more recent use because after three hours the level falls to below five nanograms per milliliter of blood. Lopez added, "For this—I mean, as a 13 nanograms per mill for the T.H.C.—" The court said, "So it indicates—the number indicates something about recency of use?" Lopez replied, "Yes." The court noted it sounded like the expert could testify about the number and recency of use without giving the actual numbers and that the actual numbers were not that relevant.

The court asked defense counsel to further explain her objection. She replied that the numbers were unreliable, could not be reproduced within 20 percent, and were "out of control." Defense counsel added it was "highly prejudicial for [Lopez] to testify that these numbers are not reliable and they cannot even report them on the report. Their lab says 'No, we can't report these because they are not reliable enough to be reported,' and yet the Court would still allow him to testify as to recency of use. That is highly inappropriate and more prejudicial than probative." Referring back to defense counsel's original discovery objection, the trial court noted the defense had the laboratory numbers since the beginning of 2015.

When the court asked Lopez if the number was sufficiently reliable to testify as to "those numbers," Lopez replied affirmatively. Defense counsel sought to voir dire Lopez and to perhaps call her own expert, outside the jury's presence, to determine the admissibility of the quantitative results. The trial court replied that counsel could cross-examine Lopez and asked counsel whether her challenge went to the weight of the evidence rather than its admissibility. Counsel replied: "No, absolutely not. Because in

order for evidence to be admissible, it must be reliable in the first place." The court questioned this point and rhetorically asked defense counsel whether an expert could rely on hearsay in forming his opinion. Defense counsel again requested an Evidence Code section 402 hearing to allow her own expert to make an offer of proof in order to preserve the issue for appeal. The court replied that counsel could put on her own expert and cross-examine Lopez. The court characterized the proceeding as an Evidence Code section 402 hearing on the issue of admissibility.

Defense counsel read into the record the following information from the laboratory report: "The quantitative values listed in this case for marijuana should be considered only an estimate and will not be reported. The laboratory is studying the reproducibility of this procedure due to larger than expected variations in quantitative values of samples that were re-analyzed. UTAK not within 20%." Lopez explained that "UTAK" referred to a quality control sample provided by a third party. The court acknowledged the laboratory report stated the amounts reported were estimates and would not be reported but asked why the expert could not testify based on those estimates if he believed they were a factor as to the recency of use. Defense counsel responded the expert could not because the laboratory had told him not to do so.

Defense counsel added that the results were not accurate to within 20 percent. The court continued referring to Lopez as the expert. Defense counsel argued the laboratory does not find the information reliable and that "his own lab says he can't talk about it." The court asked Lopez whether, even if the number was unreliable to 20 percent, he would still be able to render an opinion about the recency of use based on the information in the report. Lopez replied that he still believed the numbers were accurate. Lopez added that the note: "is for certain samples that did not analyze within 20 percent. This does not say that this sample is not within 20 percent, so I believe, in my opinion, that this quantitation is correct." The court ruled that Lopez was an expert and if the defense

thought he was relying on unreliable information in rendering his opinion, the defense could cross-examine him to try to discredit his opinion.

After a brief recess and before the jury was reconvened, defense counsel reiterated her objections to the reliability of what the court ruled the expert could rely upon and added a further foundational objection to the evidence based on *Kelly*/*Frye* because the expert was relying on a method not generally accepted as reliable in the scientific toxicology and forensic community. The court asked defense counsel why she could not just cross-examine the expert. Counsel replied, "[i]t should not even get to the point of cross examination."

The court asked counsel if she was saying that gas chromatograph mass spectrometry is not an accepted method of testing for the presence of drugs in a blood sample. Counsel replied, "I'm saying that when a laboratory has determined that its quality control is not within a range of normal, the scientific community doesn't accept its test results as accurate enough to be reported in court." The court stated: "It seems to me that it is up to the expert. If he wants to render an opinion based on information that may be unreliable, that is up to the expert, and I have already found him to be an expert. I'm not going to preclude him from rendering an opinion. I think that whether or not the information underlying that opinion is unreliable is a topic for cross-examination, not for exclusion of expert opinion."

Defense counsel noted the court was the gatekeeper to the information and requested that the defense expert be allowed to testify in the hearing. The court found that as long as Lopez was qualified as an expert, he was entitled to present his opinion. Defense counsel explained she had two motions before the court. The first was to exclude Lopez from testifying to the actual numbers of levels regarding marijuana in the blood sample, or from expressing any opinion based on those numbers because the numbers are unreliable. The second motion was to call the defense expert in an Evidence Code section 402 hearing to more thoroughly explain reliability issues to the court. The

prosecutor argued that Lopez could testify as an expert and the defense expert could rebut Lopez's opinion before the jury. The prosecutor added that Lopez would not testify as to the actual level of THC in Barrera's blood. The court concluded that the quantity evidence went to its weight as evidence, not to its admissibility.

The laboratory report, Exhibit 16, was admitted into evidence. The trial court granted defense counsel's motion to have Exhibit 16 sent with the jury for their deliberations.

Third prong of Kelly/Frye

California courts have long been willing to preclude admission of new scientific methods used to detect, analyze, or produce evidence absent a credible threshold showing that the pertinent scientific community no longer views the methods as experimental or of dubious validity. *Kelly* is applicable to new scientific techniques.[9] (*Leahy*, *supra*, 8 Cal.4th at p. 605; *People v. Webb* (1993) 6 Cal.4th 494, 524 (*Webb*); *People v. Stoll* (1989) 49 Cal.3d 1136, 1155–1156 (*Stoll*).) *Kelly* set up a three-part test: (1) the reliability of the method must be established, usually by expert testimony; (2) the witness furnishing such testimony must be properly qualified as an expert to give an opinion of the subject at issue, and; (3) the proponent of the evidence must demonstrate that correct scientific procedures were used in the particular case. (*Kelly*, *supra*, 17 Cal.3d at p. 30; *Leahy*, *supra*, 8 Cal.4th at p. 594.) The *Kelly* approach is intended to prevent lay jurors from being unduly influenced by procedures that seem scientific and infallible but are

[9] *Frye* has been superseded in federal courts by the standard articulated by the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* (1993) 509 U.S. 579, 589–598, which makes widespread acceptance an important factor in ruling evidence admissible, but no longer requires general acceptance as an absolute prerequisite to admissibility. (*Id.* at pp. 588, 594.) *Kelly*/*Frye* remains the law in California. (*People v. Daveggio and Michaud* (2018) 4 Cal.5th 790, 831, fn. 7 (*Daveggio*), citing *People v. Leahy* (1994) 8 Cal.4th 587, 591, 593–604 (*Leahy*).)

actually neither. (*Daveggio, supra,* 4 Cal.5th 790, 831; *Webb, supra,* 6 Cal.4th at p. 524; *Stoll, supra,* 49 Cal.3d at pp. 1155–1156.)

In *People v. Venegas* (1998) 18 Cal.4th 47, 79–80 (*Venegas*), the California Supreme Court explained that although the first two prongs of the *Kelly*/*Frye* test apply to a new scientific procedure, the third prong applies even to evidence derived from a long-standing scientific procedure that has long since been found to have attained general acceptance. (*Venegas, supra,* at p. 79.) *Venegas* noted that the *Kelly*/*Frye* rule tests the fundamental validity of a new scientific methodology, not the degree of professionalism with which it is applied. Usually, careless testing techniques affect the weight of the evidence, not its admissibility, and should be attacked on cross-examination or by other expert testimony. (*Venegas, supra,* at p. 80.) *Venegas* explained that the *Kelly* test is intended to forestall the jury's uncritical acceptance of scientific evidence or technology so foreign to everyday experience that it is unusually difficult for laypersons to evaluate. (*Venegas, supra,* at p. 80.)

Venegas cautioned, however, that the third prong of the *Kelly* test does not: "cover all derelictions in following the prescribed scientific procedures" but noted shortcomings such as mislabeling, mixing the wrong ingredients, or failing to follow routine precautions against contamination may well be amenable to evaluation by jurors without the assistance of expert testimony. Such errors go to the weight of the evidence rather than its admissibility. (*Venegas, supra,* 18 Cal.4th at p. 81.) All that is necessary in the limited third-prong hearing is a foundational showing that correct scientific procedures were used, which go to the weight of the evidence, not its admissibility. (*People v. Brown* (2001) 91 Cal.App.4th 623, 647 (*Brown*).) Similarly, where there is substantial evidence showing both that correct procedures were followed and were not followed, the question is again one for the jury to resolve. (*Venegas, supra,* at p. 91.) *Venegas* held that for one of the DNA tests performed by the FBI, the restriction fragment length

polymorphism analysis, the requirements of *Kelly*, including the third prong, had been satisfied. (*Venegas*, *supra*, at pp. 78–82.)

When it came to the admissibility of another DNA test based on statistical probability calculations, however, *Venegas* found the trial court erred because the People failed to establish the FBI followed correct procedures. At the *Kelly* hearing, an expert testified that the FBI's "floating bins"—ranges that database bands representing the size of DNA fragments were sorted into for purposes of producing statistical probabilities—were unduly narrow. (*Venegas*, *supra*, 18 Cal.4th at p. 92; see 2 Witkin, Cal. Evidence (5th ed. 2012) Demonstrative, Experimental, and Scientific Evidence, § 67, p. 93.) The trial court ruled any problem with the procedure employed was a matter affecting the weight of the evidence for the jury's consideration. (*Venegas*, *supra*, at pp. 91–92.) *Venegas* found the trial court's ruling was error, however, because using improperly sized floating bins meant the FBI failed "to follow correct scientific procedures within the meaning of *Kelly*'s third prong." (*Id.* at p. 92.) *Venegas* explained that not only was the failure explained by the defense expert, it was further demonstrated by the uncontradicted testimony of the FBI agent. (*Venegas*, *supra*, at p. 92.)

In using a floating bin that was too narrow, the FBI did not follow correct scientific procedures and there was no substantial evidence upon which to base a contrary conclusion. The trial court abused its discretion in failing to exclude the flawed statistical evidence. (*Venegas*, *supra*, 18 Cal.4th at pp. 92–93.) *Venegas* found the error prejudicial. (*Id*. at pp. 93–94.) Thus, where defense evidence establishes a failure in procedure, and that failure is not contradicted by substantial evidence submitted by the prosecution, the evidence produced as a result of an incorrect scientific procedure is inadmissible under the third prong of *Kelly*.

A trial court's third-prong determination is entitled to deference and must be upheld unless the record reveals that the court abused its discretion. (*Venegas*, *supra*, 18 Cal.4th at p. 91.; *People v*. *Henderson* (2003) 107 Cal.App.4th 769, 787.) Appellate

courts are required to accept the trial court's resolutions of credibility, choices of reasonable inferences, and factual determinations from conflicting substantial evidence. (*Venegas, supra*, 18 Cal.4th at p. 91.) We consider whether there is substantial evidence in the record to support the conclusion that the procedures were in fact performed in a manner fully consistent with the underlying science so that they produced reliable results. (*People v. Pizzaro* (2003) 110 Cal.App.4th 530, 559, disapproved on another ground in *People v. Wilson* (2006) 38 Cal.4th 1237, 1250–1251.) Given the facts of this case and the defense motion for a hearing on proper third-prong *Kelly* grounds, the trial court needed to conduct a hearing on the third prong of the *Kelly* test because the laboratory itself questioned its own scientific procedures in determining the quantity of THC in its blood tests.

A *Kelly* third-prong hearing does not approach the complexity of a full *Kelly* hearing, but it is necessary to make a foundational showing that the correct scientific procedures were used. (*Brown, supra,* 91 Cal.App.4th at p. 647; *People v. Hill* (2001) 89 Cal.App.4th 48, 58; *People v. Morganti* (1996) 43 Cal.App.4th 643, 661–662.) Where the prosecution shows that the correct procedures were followed, criticisms of techniques go to the weight of the evidence, not its admissibility. (*Brown, supra,* at p. 647.)

Here, there was no showing that the correct procedures were used or that they were accurate enough for Lopez to rely on the quantitative data results. Barrera challenged the admissibility of the quantitative findings of the Department of Justice test under the third prong of *Kelly*/*Frye* to the trial court and on appeal because the margin of error for the accuracy control sample was greater than 20 percent. The Department of Justice on its own report noted that any quantitative results were to be: "considered only an estimate and will not be reported. The laboratory is studying the reproducibility of this procedure due to larger than expected variations in quantitative values of samples that were re-analyzed. UTAK not within 20%."

During the limited hearing, Lopez explained that UTAK was a third party, an independent laboratory, that provided an accuracy control sample with a known amount of the substance being tested. During the hearing, Lopez assumed an error in measuring THC "above 20 percent" and stated he believed the numbers were still accurate and the quantitation was correct. Lopez failed to explain how or whether the control was measured prior to analyzing Barrera's blood.

Without a hearing on the correctness of the procedures used, and with the laboratory stating quantity results were only estimates, there was prima facie evidence before the trial court that the procedures used may produce inaccurate results. This was not a minor dispute over sloppy laboratory procedures that could affect merely the weight of the testimony rather than its admissibility. Lopez's statement at the hearing that he could quantitate Barrera's THC level, even with an error in measuring the control sample over 20 percent, lacked foundation and was conclusory. In stating that the error was over 20 percent, Lopez did not explain the amount of error in measuring the known accuracy control sample. He did not explain at any stage of the proceedings, if he could, how Barrera's particular THC levels were outside the margin of error because no specific quantity levels in Barrera's sample were given or explained. Lopez failed to establish a foundation under the third prong of *Kelly/Frye* for his opinion that he could quantitate Barrera's THC. In the face of a laboratory report stating in effect that quantity values for levels of THC in the blood were inaccurate, could not be reproduced, and should not be reported, Lopez never explained how and why the testing procedures were nonetheless correct.

On cross-examination before the jury, Lopez admitted the error rate in measuring the control sample was greater than 20 percent. Under these circumstances, the degree of error or uncertainty in measuring the control sample could be 21 percent, 31 percent, 51 percent, or 91 percent. Also, the laboratory could not reproduce THC quantity levels for individual samples. Other than the type of scientific procedure being used, the facts

of this case strongly resemble those in *Venegas*. As in *Venegas*, the defense evidence established a failure in procedure, including an admission by the laboratory that the THC quantity should not be reported.

The People failed to rebut the defense's objection, as demonstrated by inaccurate and irreproducible results, by substantial evidence.[10] Where this occurs, *Venegas* holds that the evidence produced as a result of an incorrect scientific procedure is inadmissible under the third prong of *Kelly*. An Evidence Code section 402 hearing was necessary, as occurred in *Venegas*, for the prosecution to establish the foundation for Lopez's opinion that Barrera's THC was so high that he could confidently state she had used marijuana within three hours of her blood draw.

The purpose of a hearing on the *Kelly* third prong is to establish a foundation showing that correct scientific procedures were used. (*People v. Hill, supra,* 89 Cal.App.4th 48, 58.) Like *Venegas*, the error complained of here is fundamental enough to make the evidence inadmissible absent proof from the prosecution that the procedures used were reliable. Sorting out the uncertainty of the scientific procedures

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[10] The prosecutor asked Lopez in rebuttal to assume an error margin of only 20 percent. Lopez replied that with an error rate of only 20 percent, he was sure that the quantity of THC in Barrera's blood was high enough that he could conclude she consumed marijuana within three hours of her blood draw. This was similar to the answer he gave at the limited admissibility hearing. It is unclear whether the prosecutor asked this question as a hypothetical, or if the question was asked because the prosecutor thought the error in the laboratory's measurement of the accuracy control was only 20 percent. Lopez's answer gave the inaccurate impression that the error in measuring the control sample was only 20 percent when he had already acknowledged quantity was not being reported by his laboratory because the error between the laboratory's measurement of the control sample with a known level of THC was greater than 20 percent. In fact, Lopez was apparently comfortable with inconsistently relying on a margin of measuring error of only 20 percent in the control sample while admitting on cross-examination that the error was greater than 20 percent. The People failed to establish the accuracy or reliability of the quantification of THC levels in Barrera's blood by any evidence presented at trial and relied instead on Lopez's opinion which lacked any foundation showing correct procedures were used.

was not within the common experience of most jurors. The trial court erred in failing to conduct an Evidence Code section 402 hearing for the People to establish the reliability of the testing procedures used, as well as to set forth a foundation for Lopez's opinion that Barrera consumed marijuana within three hours of her blood draw. Without a showing of reliability by the People, the proffered evidence was *inadmissible* under the third prong of *Kelly* and the Supreme Court's holding in *Venegas*.

The trial court appeared to believe that by not allowing Lopez to testify concerning the quantity values of THC in Barrera's blood, it could avoid any issues raised by the Department of Justice's warning on Barrera's laboratory report. Instead, the court permitted presentation of inadmissible evidence by allowing Lopez to refer to and rely on what he described as the high quantity of THC in Barrera's blood. Surprisingly, the court stated that if Lopez wanted to rely on information that was unreliable, it was up to him as an expert and the court was not going to preclude Lopez from rendering an opinion. The court was satisfied that as an expert, Lopez could use unreliable test data to reach further conclusions concerning when Barrera used marijuana. Lopez's testimony did not establish the accuracy of the testing procedures he used, did not establish a foundation for his opinion that he could still rely on the quantity of THC in Barrera's blood, and did not set forth a foundation for his ultimate conclusion Barrera had consumed marijuana within three hours of her blood draw.

Related to *Kelly*/*Frye* requirements for admissibility of scientific evidence are Evidence Code sections 801 and 802. Barrera argues these statutes were addressed by our Supreme Court in *Sargon Enterprises, Inc. v. University of Southern California* (2012) 55 Cal.4th 747 (*Sargon*). *Sargon* held that trial courts had to act as gatekeepers to exclude opinion testimony, pursuant to Evidence Code sections 801, subdivision (b) and 802, that is (1) based on matter of a type upon which an expert may not reasonably rely, (2) based on reasons unsupported by the material on which the expert relies, or

(3) speculative.[11] (*Sargon, supra*, 55 Cal.4th at pp. 771–772.) *Sargon* explained this meant "a court may inquire into, not only the type of material on which an expert relies, but also whether that material actually supports the expert's reasoning." " 'A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.' " (*Id*. at p. 771.)

The holding in *Sargon* has been applied to criminal cases where the assumptions by the expert were not grounded in fact or were grounded upon speculative or conjectural factors. (*People v. Wright* (2016) 4 Cal.App.5th 537, 545–546 [psychologist's diagnosis of rare condition based on speculation]; *People v. Herrera* (2016) 247 Cal.App.4th 467, 475 [court's discretion in excluding evidence of defendant's psychiatric impairments implicated defendant's ability to present his case].) Evidence Code sections 801 and 802, coupled with *Sargon*, set forth the standards for trial courts to follow in their gatekeeper role. The concerns expressed in *Sargon* about the type of information relied on by an expert are applicable here.

Whether a court is confronted with a challenge to scientific evidence based on *Kelly*/*Frye*, or based on Evidence Code sections 801 and 802 challenges to the admissibility of expert testimony, trial courts must be cognizant of their role as gatekeepers. Courts must also be aware that admissibility of specific test results in a particular case hinges on the laboratory's compliance with appropriate standards and controls as well as the availability of its testing data and results. (*People v. Axell* (1991) 235 Cal.App.3d 836, 856; *State v. Schwartz* (Minn. 1989) 447 N.W.2d 422, 425.) "[R]eliability of the test results is crucial." (*Schwartz, supra*, at p. 426.) For instance, "specific DNA test results are only as reliable and accurate as the testing procedures used

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11 In arguing that the trial court reconsider holding a complete Evidence Code section 402 hearing, defense counsel reminded the trial court of its role as a gatekeeper, although she did not expressly rely on Evidence Code sections 801 and 802 or *Sargon*. We review these authorities to guide the trial court on remand.

by the particular laboratory." (*Ibid.*) Where a laboratory fails to comport with proper guidelines, the test results lack foundational adequacy, and without more, are inadmissible. (*Id.* at p. 428.)

In *Najera v. Shiomoto* (2015) 241 Cal.App.4th 173, 175, this court reviewed an appeal by the Department of Motor Vehicles (DMV) to a ruling by the trial court reinstating Najera's driver's license after it had been suspended for Najera's having a blood-alcohol level above 0.08 percent. At the trial court, Najera successfully challenged the accuracy and scientific validity of his blood-alcohol test results which led to the suspension of his license. The procedure used by the laboratory was gas chromatography. (*Id*. at p. 180.) We held that because Najera introduced evidence showing problems with the gas chromatography procedures used to measure his blood alcohol level, he had rebutted the presumption the test results were reliable and that just because the procedure itself is generally reliable, the laboratory is not presumed to have conducted the test correctly in every case. (*Id*. at pp. 181–183.) Najera's evidence that the test procedure was done incorrectly in his case was not overcome because the DMV produced no other evidence. We affirmed the trial court's finding that Najera's uncontradicted evidence was convincing and its ruling overturning the suspension of Najera's license. (*Id*. at p. 184.) Although *Najera* involved administrative proceedings concerning suspension of a driver's license, it is instructive on the issue of incorrectly applied scientific procedures and when the burden of proof concerning the accuracy of those procedures shifts to the proponent of the evidence.

To summarize, defense counsel's motion for a third-prong *Kelly* hearing on the admissibility of the evidence was well taken considering the warnings and caveats on the face of Barrera's laboratory report. The People were required to establish that correct procedures had been used, but the trial court refused to conduct a full evidentiary hearing to determine whether correct procedures had been used. The People never established whether Lopez could rely on the quantity of THC in Barrera's blood. Therefore, the trial

court erred in denying defense counsel's motion for an evidentiary hearing on prong three of the *Kelly* test when it ruled that any problem went only to the weight of the evidence, not its admissibility. (*Venegas, supra,* 18 Cal.4th at pp. 92-94.)

Prejudice

The People contend that even if Lopez's opinions about quantity and the time of Barrera's consumption of marijuana were inadmissible, any error was harmless. The People argue there are several other signs that establish Barrera was intoxicated, including: erratic driving, lethargy, slow speech, nystagmus, slow pupils, poor performance on the modified Romberg balance test, bloodshot eyes, lack of eye convergence, possession of marijuana paraphernalia, and the presence of bumps in the back of her mouth. In our view, the People overstate the strength of their case.

All of the experts agreed Barrera's erratic driving, lethargic state, bloodshot eyes, and slow speech are equally consistent with fatigue, or that bloodshot eyes could be from allergies. Scott admitted that half of the population will demonstrate nystagmus at the extremes without being intoxicated. Warzee conceded the HGN test is usually performed on a standing subject, nystagmus can have many causes, and it is not a symptom of using marijuana. Barrera had a lack of convergence in only one eye, not both. Okorocha explained this was indicative of a medical neurological condition, not intoxication. A single part of the four-part Romberg test was administered to Barrera because she was on her back on a hospital gurney. Warzee had Barrera estimate 30 seconds. At 47 seconds Barrera told Warzee one minute had elapsed. No other Romberg test was performed on Barrera.

Although Warzee read the hospital monitor and reported a rate of 96 beats per minute, Dr. Stuart reviewed Barrera's chart and found that between 12:25 p.m. and 1:12 p.m. her heart rate was within a normal range of 76 to 86 beats per minute. Barrera's heart rate may well have increased when Warzee began the Romberg testing procedures. Warzee reported Barrera's blood pressure as normal in his report and

conceded that low blood pressure was inconsistent with someone under the effects of marijuana, which elevates blood pressure. Dr. Stuart testified Barrera's blood pressure was normal. Warzee also observed that Barrera's muscles were rigid, which was inconsistent with marijuana use. The neurological report in Barrera's hospital records indicate she was alert, and oriented to place, time, and situation.

Although Barrera had Xanax in her blood, Lopez said it stayed in the user's system for over two days and conceded its effects would wear off in three to four hours. Lopez explained a person feels the effects of marijuana for two to three hours after smoking it. Lopez conceded that the prosecutor's hypothetical based on the facts of Barrera's case could be consistent with someone who had not slept and was fatigued. He also conceded nystagmus can be evident for reasons other than being impaired.

Okorocha testified that Barrera's symptoms were consistent with fatigue and that factors like allergies could cause bloodshot eyes that had nothing to do with consuming marijuana. A lack of convergence in the eyes occurs in one-third of the population and when it happens with only one eye that person should be seen by a neurologist. Okorocha added that THC remains in a user's system far more than 12 hours, for as long as several days after the drug has any effect on the user.

In the video showing Barrera driving into the casino she crosses over the double yellow line. When she walked into the casino, however, she walked normally without stumbling. She slowed for a moment to look into her purse and did not lose her balance. A casino security guard saw Barrera playing a slot machine and observed no signs of intoxication. The same guard watched Barrera leave the casino walking in a normal fashion without staggering or stumbling. As Barrera drove away from the casino, video showed her driving over the double yellow line separating the lanes of traffic. This would have been soon after she was seen exiting the casino without losing her balance or showing signs of intoxication.

There was evidence, other than the presence of THC and the high quantity of it as testified to by Lopez, that Barrera was intoxicated. The People argue that since Barrera's time of use was not critical to its case, any error was harmless. Barrera was convicted of second degree murder on a theory of implied malice. In such cases, the People must prove the defendant was subjectively aware of the risk of death created by driving while intoxicated. This can be shown by willful consumption of alcohol or some other drug. Also, the defendant must have driven while aware of the risk to life and consciously disregarded that risk.[12] (*People v. Watson* (1981) 30 Cal.3d 290, 300–301; *People v. Doyle* (2013) 220 Cal.App.4th 1251, 1265.)

In the absence of Lopez's testimony that the THC quantity in Barrera's blood was so high that he could surmise she had used marijuana within three hours before her blood draw, the only thing Lopez could testify to for certain was the presence of THC in her blood, which indicated she used marijuana in the previous 12 hours. Further, Lopez indirectly reported the general test quantity results when he told the jury THC spikes really high, above 100, and then after three hours it drops below five nanograms per milliliter of blood. There is a large difference between being scientifically certain that Barrera used marijuana within 12 hours and concluding she used it within the previous three hours, because Lopez testified that the effects of marijuana wear off after three hours. If Barrera consumed marijuana three hours before her blood draw, this would have been at approximately 9:40 a.m., about 20 minutes before the accident while she was driving.

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[12] Murder is the unlawful killing of a human being without malice aforethought. Second degree murder is committed without premeditation and deliberation. Malice may be express or implied in second degree murder. It is implied when an unlawful killing results from a willful act, the natural and probable consequences of which are dangerous to human life, performed with conscious disregard for such danger. (*People v. Wolfe* (2018) 20 Cal.App.5th 673, 681.)

Placing Barrera in her car within three hours after she used marijuana makes a showing of conscious disregard for human life nearly a forgone conclusion. However, if the most Lopez can conclude from the spectrographic data is that Barrera had THC in her system showing she consumed marijuana within the previous 12 hours, potentially eight or nine hours after its affects would have worn off according to Lopez, Barrera's conduct is far less egregious. Each piece of non-THC evidence showing intoxication, however, can be explained by fatigue or some other factor having nothing to do with marijuana use. Without the inadmissible evidence concerning the "large" amount of THC in Barrera's blood, implied malice is more difficult for the People to show. We cannot say that without the challenged evidence the resulting conviction for second degree murder was inevitable.

Although Lopez agreed during cross-examination that the failure to reproduce the results of the accuracy control sample to within 20 percent meant the error could be greater than 20 percent, he failed to explain how great the difference was between the spectrographic testing and the quantity of THC in the known sample. This left the jury with no scientific basis to question Lopez's quantitation testimony. As we discuss further below, these problems were exacerbated when the prosecutor undermined the credibility of defense expert Okorocha by engaging him in a heated and argumentative cross-examination.

Lopez's concession that the testing error was greater than 20 percent was undermined, however, when the prosecutor asked him on redirect examination to assume an error in the testing procedure of only 20 percent. With this assumption, Lopez opined the level of THC in Barrera's blood was so high that an error of 20 percent was not significant. In so testifying, Lopez left the jury with the misimpression that his spectrographic analysis was more accurate than he just admitted to during cross-examination. The prosecutor emphasized that the error in measuring the control sample was only 20 percent, compounding the error in his own question to Lopez. Lopez further

enhanced the mantle of accuracy of the test results by initially testifying that it takes five to 10 minutes to tune the instrument, if it is not working it is taken out of service, drug samples are refrigerated leaving them stable for years, and such samples yield close to the original results.

There was an additional misstep made by defense counsel. Having been denied a proper *Kelly*/*Frye* hearing to challenge what appeared to be inadmissible evidence, she sought to have Exhibit 16 brought before the jury because it had the laboratory's statements that the values listed for marijuana should be considered only an estimate, test results could not be duplicated, and the accuracy sample could not be measured to within 20 percent.

Exhibit 16, however, includes four columns of numbers each for THC, OH-THC, and COOH-THC. Because the jury was never told what these numbers meant, and because the trial court limited Lopez's testimony concerning the actual numbers, they should have been redacted from Exhibit 16 before it was submitted to the jury. It is impossible on appeal to determine whether the jury relied on Exhibit 16 in its deliberations. If the jury read the document and considered the numbers presented therein, it did so without any explanation as to what they meant. We point this out not because it is dispositive of our prejudice analysis, but to demonstrate it is among several other greater errors undermining our confidence that the verdict would be the same had the quantitative THC evidence been found inadmissible at the conclusion of a *Kelly*/*Frye* hearing and excluded.[13]

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[13] The parties have not briefed this point. However, we would still find prejudice in the absence of defense counsel seeking to place Exhibit 16 before the jury prior to redacting what appears to be testing data. Further, if counsel's motion permitting Exhibit 16 could be characterized as invited error, it occurred only after the trial court failed to conduct a proper third-prong *Kelly*/*Frye* hearing, the prosecution's expert over-asserted the accuracy of the spectrographic testing to conclude Barrera consumed marijuana within three hours of her blood draw, and the prosecutor baited the defense expert into an argumentative cross-examination. Additional briefing by the parties on

Although Barrera argues we should employ the standard of review set forth in *Chapman v. California* (1967) 386 U.S. 18 (*Chapman*), evidentiary errors are usually evaluated under the prejudice standard set forth in *People v. Watson* (1956) 46 Cal.2d 818, 836 (*Watson*). *Venegas* applied the *Watson* standard of review that an error in admission of scientific evidence requires reversal only "if it is reasonably probable the verdict would have been more favorable to defendant in the absence of the error." (*Venegas*, *supra*, 18 Cal.4th at p. 93.) *Venegas* found the improper admission of DNA evidence prejudicial to the defendant and reversed the judgment for a new trial. (*Id.* at pp. 93–94.) The improper use of inadmissible scientific evidence here is indistinguishable from its improper use in *Venegas*. We therefore reverse the judgment and remand for further proceedings.

Retrial

In the event of retrial, the prosecution will be free to introduce evidence relative to its spectrographic procedures to establish the accuracy of its test results and to establish a foundational basis for its expert to still rely on quantitative data from the blood test. Such an evidentiary showing must, of course, occur within the context of a third-prong *Kelly* hearing and must rely on methodology generally accepted within the scientific community. (*Venegas*, *supra*, 18 Cal.4th at p. 95.) The evidentiary foundation for the expert's opinion must also comport with Evidence Code sections 801 and 802 in compliance with our Supreme Court's opinion in *Sargon*.

PROSECUTORIAL MISCONDUCT

Barrera contends the prosecutor's references to the deceased victim's children and grandchildren, as well as his argumentative cross-examination of the defense expert witness, constituted prosecutorial misconduct. We agree that the prosecutor should not

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invited error and any related ineffective assistance of counsel would not alter our conclusion that greater prejudicial errors occurred long before defense counsel moved to have an unredacted version of Exhibit 16 before the jury during its deliberations.

have solicited victim impact testimony that had nothing to do with the charged offenses, but find this did not constitute misconduct. We note, however, that the trial court erred in overruling defense counsel's objections to these questions. Although the prosecutor's cross-examination of the defense expert was argumentative and this was problematic given the issues undermining the admissibility of the quantity of THC in Barrera's blood sample, we do not find prosecutorial misconduct.[14]

Victim Impact References

During his opening statement to the jury, the prosecutor stated that Maxsimiano Aldana had nine children and 25 grandchildren. The prosecutor asked Sara Cabrera, one of the injured passengers, about her children and grandchildren. She replied she had one child and two grandchildren. Over defense counsel's objections, the prosecutor elicited testimony from Martha Aldana that her husband Maxsimiano had nine children and 29 grandchildren. During closing argument, the prosecutor said Barrera consciously acted with disregard to human life, and that Maxsimiano was a husband to Martha, father of eight, and grandfather to 29.

Cross-Examination of Defense Expert

From the beginning of cross-examination, the prosecutor asked Okorocha questions that were argumentative and appeared to be provocative. Some of defense counsel's objections were sustained by the court or the court asked the prosecutor to move on to another question. Several of defense counsel's objections were overruled. For his part, Okorocha became hostile to the prosecutor and replied to questions in an argumentative and sometimes sarcastic manner.

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[14] Although defense counsel did not object to every line of questioning by the prosecutor, the People concede defense counsel's objections were enough to overcome any assertion of forfeiture.

Analysis

A prosecutor who uses deceptive or reprehensible methods to persuade the jury commits misconduct. Reversal under the federal Constitution is necessary only when these methods infect the trial with such unfairness as to make the resulting conviction a denial of due process. (*People v. Salcido* (2008) 44 Cal.4th 93, 152 (*Salcido*), citing *Darden v. Wainwright* (1986) 477 U.S. 168, 181.) A prosecutor's conduct not rising to the level of a constitutional violation is misconduct under state law only if it involves the use of deceptive or reprehensible methods to attempt to persuade either the court or the jury. A prosecutor is given wide latitude to vigorously argue his or her case and to make fair comment upon the evidence, including reasonable inferences or deductions that can be drawn from the evidence. (*People v. Ledesma* (2006) 39 Cal.4th 641, 726.)

To preserve a claim of prosecutorial misconduct on appeal the defense must make a timely objection at trial and request an admonition. The point is reviewable only if an admonition would not have cured the harm caused by the misconduct. (*People v. Earp* (1999) 20 Cal.4th 826, 858.) This is only a general rule. A defendant is excused from the necessity of either a timely objection and/or a request for admonition if either would be futile. Further, a request the jury be admonished does not forfeit the issue if an admonition would not have cured the harm caused by the misconduct. (*People v. Hill* (1998) 17 Cal.4th 800, 820 (*Hill*).) Questioning of an expert about similar cases he or she has testified to is permissible to show bias. Also, an expert witness can be questioned more extensively and searchingly than a lay witness. (*People v. Shazier* (2014) 60 Cal.4th 109, 136.) Furthermore, there is usually no prejudice where the trial court sustains defense counsel's objections. (*People v. Peoples* (2016) 62 Cal.4th 718, 794; *People v. Pinholster* (1992) 1 Cal.4th 865, 943, overruled on other grounds in *People v. Williams* (2010) 49 Cal.4th 405, 459.)

Prosecutorial misconduct, however, may act to create an atmosphere of prejudice more intense than the sum of its parts. (*People v. Seumanu* (2015) 61 Cal.4th 1293,

1350; *Hill*, *supra*, 17 Cal.4th 845–846 [several acts of prosecutorial misconduct may have been sufficient to require reversal of guilt and penalty judgments, but issue not decided because of other errors]; *People v. Vance* (2010) 188 Cal.App.4th 1182, 1206–1207 (*Vance*) [sheer number of misconduct incidents by prosecutor were "profoundly troubling" and may have been deciding factors in bringing about the defendant's conviction so that standard instruction that argument of counsel not evidence would have no palliative force].)

Here, the prosecutor referred to the surviving children and grandchildren in opening and closing argument. Over objections from defense counsel, the prosecutor also elicited testimony from two of the surviving victims to establish the number of children and grandchildren they had. The prosecutor's questions were improper, but did not rise to the level of misconduct because the questions were limited. Although the prosecutor mentioned victim impact testimony during his closing argument, the comment was brief. The trial court did err in failing to sustain defense counsel's objections to questions concerning victim impact before they were answered by witnesses. The court could have cured this error by admonishing the jury to disregard the questions and responses.

Defense counsel also lodged several objections to the prosecutor's cross-examination of Okorocha. Some were on the ground of argumentative questioning, some were on other grounds. The trial court sustained some objections, but largely permitted the prosecutor to continue his questioning. Overall, we find the course of cross-examination, while aggressive, did not rise to the level of prosecutorial misconduct.

The cornerstone of the People's proof that Barrera was intoxicated and acting with conscious disregard for human life was based on the quantity of THC in her blood. Okorocha had strong opinions about why the quantitative evidence was inadmissible. The prosecutor certainly had the right to challenge Okorocha's methods and opinions, but we caution the prosecutor in the event of retrial to maintain the proper professional

decorum associated with his office and duties. "A prosecutor is held to a higher standard than that imposed on other attorneys because he or she exercises the sovereign powers of the state." (*People v. Herring* (1993) 20 Cal.App.4th 1066, 1076.) That Okorocha could be coaxed into engaging in an argumentative colloquy by and with the prosecutor does not diminish the prosecutor's responsibility for conducting a professional cross-examination of the witness. The trial court on remand has a duty not to permit improper victim impact testimony as well as unduly argumentative examination of any witness.

ALLEGED INEFFECTIVE ASSISTANCE OF COUNSEL

Introduction

During trial, there were references to Barrera receiving *Miranda* warnings prior to Warzee conducting the Romberg balance test on her. During trial, Warzee testified, and his answer was ordered stricken, that he was not privy to medication given to Barrera because she had not waived her *Miranda* rights. Barrera had been arrested at 12:17 p.m. and Warzee contacted her a minute later and began his examination of her between 12:17 and 12:40 p.m. when her blood sample was taken. Arguing another point to the trial court during a side bar conference, defense counsel indicated Barrera did not receive her *Miranda* rights "until 12:20 p.m. or so."

Defense counsel did not file a motion to suppress the counting procedure used by Warzee as part of the Romberg test. The record is not clear as to when Barrera was read her *Miranda* rights, how she did not waive those rights, which officer read Barrera her rights, or when Warzee began the Romberg test relative to when Barrera did not waive her rights. Barrera contends that because the counting procedure used by Warzee is subject to *Miranda*, her counsel was ineffective in failing to seek suppression of this evidence prior to trial.

Analysis

Defendant has the burden of proving ineffective assistance of trial counsel. To prevail on a claim of ineffective assistance of trial counsel, the defendant must establish

not only deficient performance, which is performance below an objective standard of reasonableness, but also prejudice. Prejudice is shown when there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different. (*Williams v. Taylor* (2000) 529 U.S. 362, 391, 394; *In re Hardy* (2007) 41 Cal.4th 977, 1018) A reasonable probability is one sufficient to undermine confidence in the outcome. The second question is not one of outcome determination but whether counsel's deficient performance renders the result of the trial unreliable or the proceeding fundamentally unfair. (*In re Hardy, supra,* at p. 1018.)

A court must indulge a strong presumption that counsel's conduct falls within the wide range of reasonable professional assistance. Tactical errors are generally not deemed reversible. Counsel's decisionmaking is evaluated in the context of the available facts. To the extent the record fails to disclose why counsel acted or failed to act in the manner challenged, appellate courts will affirm the judgment unless counsel was asked for an explanation and failed to provide one, or, unless there simply could be no satisfactory explanation. Prejudice must be affirmatively proved. The record must affirmatively demonstrate a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different. (*People v. Maury* (2003) 30 Cal.4th 342, 389.) Attorneys are not expected to engage in tactics or to file motions that are futile. (*Id*. at p. 390 [counsel did not renew a motion to change venue that had already been denied]; *People v. Price* (1991) 1 Cal.4th 324, 386–387.)

People v. Bejasa (2012) 205 Cal.App.4th 26, 41 (*Bejasa*), addressed the question of whether the estimation of time portion of the Romberg test was testimonial after a defendant had been placed in custody and whether it was subject to *Miranda* warnings. Field sobriety tests are generally nontestimonial in nature. (*Bejasa, supra,* at p. 41.) *Bejesa* analyzed *Pennsylvania v. Muniz* (1990) 496 U.S. 582 (*Muniz*), and explained in *Muniz* the defendant had performed the field sobriety test poorly. Muniz had not been given *Miranda* warnings. Among the questions Muniz was asked was to give his current

age, date of birth, and the date of his sixth birthday. (*Muniz*, *supra*, at p. 586; *Bejasa*, *supra*, at p. 42.) The Supreme Court held that any physical observations made by the police were nontestimonial and were not gathered in violation of *Miranda*. (*Muniz*, *supra*, at p. 583.) The Supreme Court further held, however, that the question calling for Muniz to calculate his sixth birthday required him to "communicate an express or implied assertion of fact or belief." (*Id.* at p. 597.) The question thus required a testimonial response. (*Id.* at p. 598.)

Muniz described a defendant in this situation as facing the trilemma of expressing the truth, a falsehood, or silence. (*Muniz*, *supra*, 496 U.S. at p. 597.) The court in *Bejasa* agreed with the defendant's assertion that the Romberg time estimation test was materially indistinguishable from the sixth birthday question in *Muniz* because the defendant was asked to make a calculation. (*Bejasa*, *supra*, 205 Cal.App.4th at p. 43.) *Bejasa* acknowledged that mere counting may not be testimonial, but held the time estimation portion of the Romberg test required a further calculation that made it testimonial for *Miranda* purposes. (*Bejasa*, *supra*, at p. 44.) Ultimately, *Bejasa* found the error not prejudicial under the standard of review in *Chapman*. (*Bejasa*, *supra*, at p. 45.)

The precise timing of when Barrera was *Mirandized* is uncertain. She was arrested at 12:17 and Warzee began his examination of her thereafter. Defense counsel referred to Barrera receiving her *Miranda* warnings three minutes after arrest and Warzee stated that she did not waive *Miranda*. If Warzee had Barrera perform the time estimation of the Romberg test before she was *Mirandized*, her response was subject to suppression pursuant to *Bejasa*. If, on the other hand, Warzee or Scott *Mirandized* Barrera prior to application of the Romberg test, and she did not waive those rights, then her response had to be suppressed. (*Maryland v. Shatzer* (2010) 559 U.S. 98, 105–117; *People v. Bridgeford* (2015) 241 Cal.App.4th 887, 900–904; generally see *People v. Elizalde* (2015) 61 Cal.4th 523, 536–542.) It is possible there was some other problem

with Barrera's invocation of her *Miranda* rights that lies outside the record which caused defense counsel not to seek suppression of Barrera's responses to the time estimation segment of the Romberg test. We cannot conceive of a valid tactical reason for defense counsel not moving to suppress her client's response to Warzee. The Romberg test evidence appears to support the prosecution's theory that Barrera was impaired when she was driving.

Although it appears defense counsel was ineffective for failing to file a suppression motion on the Romberg test given to Barrera, we do not find defense counsel ineffective at this juncture because we cannot discern the precise timeline of when Barrera was given her *Miranda* rights and when she did not waive those rights. Also, there may be other reasons defense counsel did not seek to suppress this evidence based on facts outside the record. Assuming that evidence of the Romberg test was inadmissible, failing to suppress the test results would have a prejudicial impact on Barrera's case, especially if the quantitative THC evidence is inadmissible.

EVIDENCE OF DEFENDANT'S SUSPENDED DRIVER'S LICENSE

Barrera contends the trial court erred in denying her two motions pursuant to Evidence Code section 352 to excluded reference to the fact that her driver's license was suspended. In denying the motion, the trial court noted that because the jury was going to learn about Barrera's prior conviction for driving under the influence, it would not be a surprise to the jury that her license was suspended.

Barrera relies on *People v. Spragney* (1972) 24 Cal.App.3d 333, 338, which held that the driver's status as an unlicensed driver was irrelevant to a vehicular manslaughter charge. The court in *Spragney* reasoned that because the operator's negligence is to be determined by the facts at the time of the accident, whether the operator had a license to operate an automobile under the laws of the state was immaterial unless there was a causal relationship between the injuries and the failure to have a license. (*Ibid.*) The general rule is that in California, evidence that a driver is not licensed is not admissible

on the issue of negligence as the cause of an accident in both civil and criminal cases. (*People v. Taylor* (1986) 179 Cal.App.3d Supp. 1, 5–6.)

We find *Spragney* factually distinguishable from this case. Barrera did not merely fail to have a license; her license had been revoked because she had driven while intoxicated. There is therefore a causal relationship between the reason for her lack of a license—her allegedly intoxicated driving—and the collision on which the manslaughter charges were based. Furthermore, the allegations here were not founded on allegations of mere negligence, but on allegations of gross vehicular manslaughter and second degree murder based on implied malice. The absence of a driver's license was relevant to a showing of gross negligence and the trial court did not abuse its discretion in denying defendant's motion to exclude this evidence.[15]

DISPOSITION

The judgment is reversed and remanded for further proceedings consistent with the views expressed herein. If Barrera is retried and convicted, should she receive a qualifying substantial sentence, the trial court shall conduct a hearing to review factors relevant to Barrera's future suitability for parole pursuant to *People v. Franklin, supra*, 63 Cal.4th 261.

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[15] Barrera contends that the combination of errors resulted in cumulative error. Pursuant to our Supreme Court's ruling in *Venegas*, the trial court's failure to conduct a *Kelly*/*Frye* hearing was itself reversible even under the *Watson* standard of review. The other identified error established by the record was the trial court's failure to sustain defense counsel's objections to the prosecutor's questions concerning victim impact testimony. Considered in isolation, this error would not require reversal. Viewed in the context of the *Kelly*/*Frye* error, permitting the victim impact testimony could have had a cumulative impact on the jury's deliberations.

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SNAUFFER, J.

WE CONCUR:

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DETJEN, Acting P.J.

_____
PEÑA, J.